

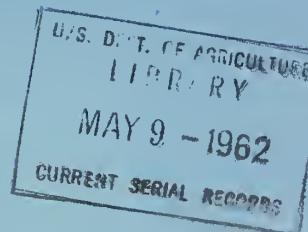
## **Historic, Archive Document**

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Here, on Mt. Rose, Nevada, Dr. J. E. Church made  
the first western snow survey 50 years ago.



FEDERAL - STATE - PRIVATE COOPERATIVE  
SNOW SURVEY and WATER SUPPLY FORECASTS  
for  
WYOMING

UNITED STATES DEPARTMENT of AGRICULTURE...SOIL CONSERVATION SERVICE,  
and  
STATE ENGINEER of WYOMING

Data included in this report were obtained by the agencies named above  
in cooperation with the U.S. Forest Service, Bureau of Reclamation,  
National Park Service, Geological Survey, Indian Service, Wheatland  
Irrigation District, and other Federal, State and private organizations.

AS OF  
FEB. 1, 1959

# UNITED STATES DEPARTMENT OF AGRICULTURE - SOIL CONSERVATION SERVICE

## TO RECIPIENTS OF COOPERATIVE SNOW SURVEY AND WATER SUPPLY FORECAST REPORTS:

The climate of the cultivated and populated areas of the West is characterized by relatively dry summer months. Such precipitation as occurs falls mostly in the winter and early spring months when it is of little immediate benefit to growing crops. Fortunately, most of this precipitation falls as mountain snow which stays on the ground for months, melting later to sustain streamflow during the period of greatest demand during late spring and summer. Thus, nature provides in mountain snow an imposing water storage facility.

The amount of water stored in mountain snow varies from place to place as well as from year to year and accordingly, so does the runoff of the streams. The best seasonal management of variable western water supplies results from fore-knowledge of the runoff.

A snow survey consists of a series of about ten samples taken with specially designed snow sampling equipment along a permanently marked line, about 1000 feet in length, called a snow course. The use of snow sampling equipment provides snow depth and water equivalent values for each sampling point. The average of these values is reported as the snow survey measurement for a snow course.

Snow surveys are made monthly or semi-monthly beginning in January or February and continue through the snow season until April, May or June. Currently more than 1300 western snow courses are measured each year. These measurements furnish the key data for water supply forecasts.

By relating snow survey measurements taken over a period of years to spring-summer runoff during the same period, relationships have been developed which make it possible to forecast seasonal runoff several months in advance of occurrence. In order to make a forecast, once a forecast relationship has been developed, the maximum snow water content at previously selected key snow courses is usually entered in the forecast relationship. More accurate forecasts are often obtained when other factors such as soil moisture, base flow and spring precipitation are considered and included in the forecast relationships.

Listed below are the Federal-State-Private Cooperative Snow Survey and Water Supply Forecast reports available for the West which contain detailed information on snow survey measurements, streamflow forecasts, reservoir storage, soil moisture and other guide data to water management and conservation decisions.

## PUBLISHED BY SOIL CONSERVATION SERVICE

REPORTS RIVER BASINS	ISSUED	COOPERATING WITH	LOCATION
COLORADO, RIO GRANDE AND ARKANSAS	MONTHLY (FEB.-MAY)	COLO. EXP. STATION COLO. STATE ENGINEER NEW MEXICO STATE ENGINEER	FT. COLLINS, COLO.
COLUMBIA <i>Includes Alaska</i>	MONTHLY (JAN.-MAY)	IDAHO STATE ENGINEER	BOISE, IDAHO
UPPER MISSOURI	MONTHLY (FEB.-MAY)	MONT. AGR. EXP. STATION	BOZEMAN, MONTANA
WEST-WIDE	(OCT. 1, APR. 1 AND MAY 1)	COOPERATORS	PORTLAND, OREGON

## STATES

ARIZONA	SEMI-MONTHLY (JAN. 15-APR. 1)	SALT R. VALLEY WATER USERS ASSOCIATION	PHOENIX, ARIZONA
NEVADA	MONTHLY (FEB.-APR.)	NEVADA STATE ENGINEER	RENO, NEVADA
OREGON	MONTHLY (JAN.-MAY)	ORE. AGR. EXP. STATION	PORTLAND, OREGON
UTAH	MONTHLY (JAN.-MAY)	UTAH STATE ENGINEER UTAH AGR. EXP. STATION	SALT LAKE CITY, UTAH
WASHINGTON	MONTHLY (FEB.-MAY)	WASH. STATE DEPT. OF CONSERVATION	SPOKANE, WASHINGTON
WYOMING	MONTHLY (FEB.-JUNE)	WYOMING STATE ENGINEER	CASPER, WYOMING

Copies of the various reports may be secured from: Head, Water Supply Forecasting Section  
Soil Conservation Service  
209 S.W. 5th Avenue, Portland 4, Oregon

## PUBLISHED BY OTHER AGENCIES

### OTHER SNOW SURVEY REPORTS

BRITISH COLUMBIA	MONTHLY (FEB.-JUNE)	COMPTROLLER, WATER RIGHTS BR., DEPT. OF LANOS AND FORESTS, PARLIAMENT BLDGS. VICTORIA, B.C.
CALIFORNIA	MONTHLY (FEB.-MAY)	CALIFORNIA DEPARTMENT OF WATER RESOURCES, SACRAMENTO, CALIFORNIA

FEDERAL-STATE COOPERATIVE  
SNOW SURVEYS AND WATER FORECASTS

FOR  
WYOMING

Issued  
February 1, 1959

Report Prepared  
by  
George W. Peak  
Snow Survey Supervisor  
State of Wyoming

Soil Conservation Service  
345 East 2nd Street  
P. O. Box 699  
Casper, Wyoming

Issued by

B. H. Hopkins  
State Conservationist  
Soil Conservation Service

Earl Lloyd  
State Engineer of Wyoming  
Cheyenne, Wyoming



PRELIMINARY WATER SUPPLY OUTLOOK  
FOR  
WYOMING  
February 1, 1959

- \* Extreme variations in the mountain snow packs exist throughout Wyoming. The water content of the snow ranges from 55% of the February average on the southern flank of the Wind River Range to 162% of normal on the northern watersheds of the Big Horns.
- \* The status of the state's reservoirs is exactly the normal amount for this time of year.
- \* In general, soil moisture storage beneath the pack is below normal.

## SNAKE RIVER BASIN

Snow surveys in the Snake River Watershed above Moran indicate a flow into Jackson Lake of 95% of normal. The watersheds below Jackson Lake rise to 108% and then drop progressively to 88% on the Salt River above the Wyoming-Idaho state line.

Jackson Lake storage is standing at 470,700 acre-feet, which is close to the February 1 average.

## GREEN RIVER BASIN

Conditions on the Green River at this time indicate a seasonal (April-September) runoff of 75% of normal.

## NORTH PLATTE BASIN

The February 1 snow pack on the North Platte Watershed indicates a seasonal runoff of 90% at Saratoga. The North Platte reservoirs are 136% of the average February 1 storage.



#### WIND RIVER BASIN

In the Wind River Basin, the combination of snow water and soil moisture is close to normal in the Dubois area indicating a runoff of about 95% of average. The southern end of the Wind River Range is in extremely serious condition. Even though normal or close to normal snow fall exists for the balance of the winter, the expected yield will be only 75%.

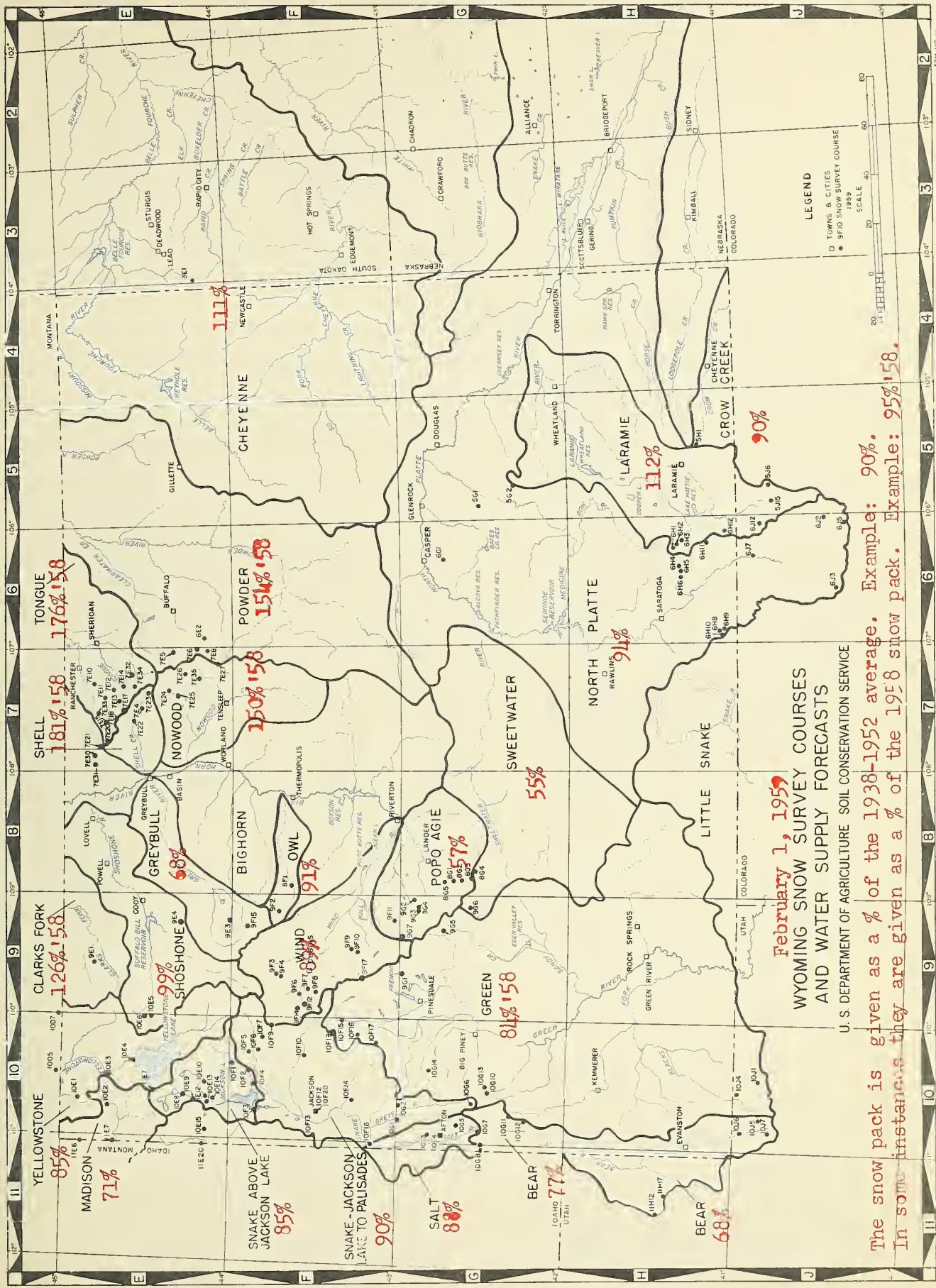
#### BIG HORN BASIN

The Owl Creek and Greybull Watersheds are low in snow water accumulation; however, the data is taken from low elevation courses that do not accurately express high watershed storage. The expected yield into Buffalo Bill Reservoir is about 96%.

#### BIG HORN MOUNTAINS

There are only three years of past records for a comparative basis in the Big Horn Mountains; however, a heavy snow pack is lying across the northern plateau and slopes of the Big Horns. The southern end of the Big Horn Range is a little above normal.





February 1, 1952  
WYOMING SNOW SURVEY COURSES  
AND WATER SUPPLY FORECASTS

U.S. DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE

The snow pack is given as a % of the 1938-1952 average. Example: 90%. In some instances they are given as a % of the 1958 snow pack. Example: 95% 158.

12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31

# INDEX TO WYOMING SNOW COURSES

LOCATION														LOCATION													
DRAINAGE BASIN AND COURSE NAME	WYOMING NUMBER	ELEV.	SEC. LAT.	TWP.	RANGE LONG.	RECORD BEGAN	MEAS. DATES a	MEAS. BY b	DRAINAGE BASIN AND COURSE NAME	WYOMING NUMBER	ELEV.	SEC. LAT.	TWP.	RANGE LONG.	RECORD BEGAN	MEAS. DATES a	MEAS. BY b										
MISSOURI RIVER DRAINAGE																											
HADISON RIVER									CROW CREEK																		
Norris Basin	10E2	7500	44°44'		110°42'	1936	3,4	2	Pole Mountain #2	5H1	8700	35	15N	72W	1936	2,3,4,5	1,4										
21 Mile +m	11E6	7150	1	11S	5E	1934	1,2,3,4,5	6	Albany	6H11	3400	18	14N	78W	1949	2,3,4,5	1										
West Yellowstone +m	11E7	6700	34	13S	5E	1934	1,2,3,4,5	6	Bottle Creek	6H8	8200	24	14N	85W	1936	2,3,4,5	1,4										
YELLOWSTONE									Boxelder	5G1	9000	31	30N	75W	1950	2,3,4,5	1										
Canyon	10E3	7750	44°44'		110°30'	1938	1,2,3,4,5	1	Casper Mountain	6G1	8700	16	32N	79W	1954	1,2,3,4,5	1										
Cooke City +m	1007	7400	25	9S	14E	1937	1,2,3,4,5	2	Columbine +c	6G3	9300	21	5N	82W	1936	2,3,4,5	1										
Crevice Mountain +m	1005	8400	22	9S	9E	1935	3,4	4	Fox Park	6H12	9200	21	13N	78W	1936	2,3,4,5	4										
East Entrance	10E6	7000	17	52N	109W	1948	1,2,3,4,5	2	LaBonte	5G2	8450	11	27N	74W	1949	2,3,4,5	1										
Lake Camp	10E4	7850	44°34'		110°24'	1937	1,2,3,4,5	1	North Barrett Creek #2	6H5	9400	30	16N	80W	1936	2,3,4,5	1,4										
Lupine Creek	10E1	7300	44°54'		110°37'	1938	1,2,3,4,5	2	North French Creek #1	6H4	10200	27	16N	80W	1938	2,3,4,5	1,4										
Thumb Divide	10E7	7900	44°22'		110°35'	1946	2,3,4	5	Northgate +c	6J7	8500	7	11N	79W	1950	2,3,4,5	1										
Sylvan Pass	10E5	7100	12	52N	110W	1936	1,2,3,4,5	2	Old Battle	6H10	9800	29	14N	85W	1936	2,3,4,5	1,4										
CLARK'S FORK									Park View +c	6J2	9200	24	5N	78W	1936	2,3,4,5	1										
Lodgepole	9E1	8200	32	56N	106W	1940	2,3,4,5	1,4	Ryan Park #2	6H6	6400	34	16N	81W	1936	2,3,4,5	1,4										
WIND RIVER									Webber Spring	6H9	9000	27	14N	85W	1936	2,3,4,5	1,4										
Big Warm	9F12	8800	36	42N	109W	1955	2,3,4,5	1	Willow Creek Pass +c	6J5	9500	1	4N	78W	1938	2,3,4,5											
Burroughs Creek	9F4	8800	15	43N	107W	1948	2,3,4,5	1	CHEYENNE RIVER																		
Oinwoodie	9F10	10000	9	39N	105W	1948	2,3,4,5	1,3	Upper Spearfish +s	3E1	6500	21	3N	1E	1944	2,3,4	4										
Ory Creek	9F9	9500	34	4N	105W	1948	2,3,4,5	1,3	GREEN RIVER & POPO AGIE RIVER																		
DuNoir	9F6	8750	27	42N	108W	1940	2,3,4,5	1	Twenty Lakes	9G7	10500	2	1S	5W	1959	2,3,4	1										
Geyser Creek	9F7	8500	12	41N	108W	1948	2,3,4,5	1	GREEN RIVER & WIND RIVER																		
Little Warm	9F8	9500	24	41N	108W	1948	2,3,4,5	1	Oinwoodie Glaciers	9F17	10500	43°14'	109°35'	1959	2,3,4	1											
Sheridan R.S. #2	9F14	7500	3	42N	109W	1955	2,3,4,5	1	COLORADO RIVER DRAINAGE																		
T-Cross Ranch	9F3	8000	1	43N	107W	1940	2,3,4,5	1	GREEN RIVER																		
Togwotee Pass	10F9	9600	29	44N	110W	1936	2,3,4	5	Big Park	10G11	8700	7	27N	117W	1951	2,3,4,5	1										
POPO AGIE RIVER									Blind Bull	10G2	8750	6	34N	115W	1948	2,3,4,5	1										
Blue Ridge	8G2	9500	23	31N	101W	1939	2,3,4,5	1	Otch Joe R.S.	9G5	8700	32	31N	104W	1936	2,3,4,5	1										
Bruce's Camp	8G5	6500	24	32N	101W	1955	2,3,4	1	East Rim Divide	10F17	7950	32	37N	111W	1935	1,2,3,4,5	1										
Hobbs Park	9G3	10000	22	2S	3W	1948	2,3,4,5	1,3	Gros Ventre	10F19	8750	36	40N	111W	1948	2,3,4,5	1										
Mosquito Park R.S.	9G4	9500	23	2S	3W	1940	2,3,4,5	1,3	Hewinta R.S. +u	10J4	9500	33	3N	13E	1930	4											
Sawmill Glade	8G1	8500	3	31N	101W	1939	2,3,4,5	1	Hole-in-the-Rock +u	10J1	9150	13	2N	15E	1931	4											
South Pass	8G3	9000	13	30N	101W	1939	2,3,4,5	1	Kelly R.S.	10G12	8200	13	26N	118W	1951	2,3,4,5	1										
St. Lawrence R.S.	9F11	9000	26	1N	4W	1940	2,3,4,5	1,3	Kendall R.S.	10F15	7900	23	33N	110W	1936	2,3,4,5	1										
Trout Creek	9G2	8400	5	2S	2W	1948	2,3,4,5	1,3	Loomis Park	10F16	8500	14	37N	111W	1936	2,3,4,5	1										
OWL CREEK									Mulligan Park	9G1	8900	17	35N	108W	1936	2,3,4,5	1										
Beavers Mill	9F2	8900	6	43N	102W	1948	2,3,4,5	1	Old Battle	6H10	9800	29	14N	85W	1936	2,3,4,5	1,4										
Owl Creek	8F1	8700	36	43N	101W	1948	2,3,4,5	1	Piney-LaBarge	10G10	8800	29	29N	114W	1937	2,3,4,5	1										
GREYBULL RIVER									Poison Meadows	10G6	8500	29	30N	116W	1948	2,3,4,5	1										
Timber Creek #2	9E3	3800	25	47N	103W	1956	2,3,4,5	1	Snyder Basin R.S. #2	10G13	8040	15	29N	114W	1956	2,3,4,5	1										
Wood River #2	9F15	8000	23	45N	103W	1956	2,3,4,5	1	Soda Lake	10G14	8300	14	33N	115W	1955	2,3,4,5	1										
SHOSHONE RIVER									COLUMBIA RIVER DRAINAGE																		
Carter Mountain	9E4	7800	15	50N	103W	1957	1,2,3,4	1	GREEN RIVER & POPO AGIE RIVER																		
East Entrance	10E5	7000	17	52N	109W	1948	1,2,3,4,5	2	Twenty Lakes	9G7	10500	2	1S	5W	1959	2,3,4	1										
Sylvan Pass	10E5	7100	12	52N	110W	1936	1,2,3,4,5	2	GREEN RIVER & WIND RIVER																		
NOWOOD CREEK									Oinwoodie Glaciers	9F17	10500	43°14'	109°35'	1959	2,3,4	1											
Cold Springs Camp	7E25	8700	1	50N	88W	1956	2,3,4,5	1	SNAKE RIVER BASIN (Above Jackson Lake)																		
Medicine Lodge Lakes	7E24	9500	7	51N	87W	1956	2,3,4,5	1	Arizona	10F1	6850	3	46N	113W	1919	2,3,4	5										
Munkers Pass	7E8	9700	11	48N	85W	1960	2,3,4,5	1	Aster Creek	10E8	7700	44°17'	1919	2,3,4	5												
Onion Gulch	7E27	8100	31	48N	85W	1956	2,3,4,5	1	Base Camp	10F2	6900	20	45N	113W	1947	2,3,4	5										
Tensleep Lake	7E26	9075	33	50N	86W	1956	2,3,4,5	1	Coulter Creek	10E10	7600	44°09'	110933'	1919	2,3,4	2											
Tyrell R.S.	7E35	8300	30	49N	88W	1956	2,3,4,5	1	Glade Creek	10E13	7200	44°08'	110944'	1919	2,3,4	5											
SHELL CREEK									Grassy Lake	10E15	7255	6	48N	117W	1940	2,3,4,5	5										
Bald Mountain	7E21	9600	33	56N	91W	1956	2,3,4,5	1	Huckleberry Divide	10E14	7300	32	48N	115W	1919	2,3,4	5										
Beaver-Tongue Divide	7E20	9200	12	55N	91W	1956	2,3,4,5	1	Lewis Lake Divide	10E9	7900	44°13'	110940'	1919	2,3,4,5	5											
Bone-Spring Divide	7E18	9200	32	55N	89W	1956	2,3,4,5	1	Moran	10F4	6800	8	45N	114W	1919	2,3,4	5										
Granite Creek Camp	7E22	7800	15	53N	89W	1956	2,3,4,5	1	Moran Bay	10F3	6800	14	45N	116W	1919	2,3,4	5										
Granite Pass	7E17	8950	19	54N	88W	1956	2,3,4,5	1	Snake River Station	10E12	6780	44°08'	110940'	1919	2,3,4	5											
Granite Pass	7E17	8000	10	55N	88W	1956	2,3,4,5	1	Thum Divide	10E7	7900	44°22'	110935'	1951	2,3,4	5											
Ranger Creek	7E4	8800	32	53N	88W	1935	2,3,4,5	1	JACKSON LAKE TO PALISADES																		
Shell Creek	7E23	9600	12	52N	88W	1956	2,3,4,5	1	Afton R.S.	10F4	6200	30	32N	118W	1936	2,3,4,5	4										
PORCUPINE CREEK									Blackrock	10F7	3600	4	44N	111W	1936	2,3,4	5										
Five Springs Falls	7E31	7500	19	56N	92W	1956	2,3,4,5	1	Blind Bull	10G2	8750	6	34N	115W	1948	2,3,4,5	1										
Medicine Wheel	7E30	9000	24	56N	92W	1956	2,3,4,5	1	Bryan Flat	10F14	6250	9	39N	115W	1936	1,2,3,4,5	1										
TONGUE RIVER									CCC Camp	10F7	7500	9	29N	118W	1936	2,3,4,5	1,4										
Beaver-Tongue Divide	7E20	9200	12	55N	91W	1956	2,3,4,5	1	Cottonwood Wood	10E5	7500	25	31N	118W	1936	2,3,4,5	1										
Big Goose #2	7E32	7700	4	53N	86W	1955	2,3,4,5	1	Deadman Ranch	10G1	6534	28	35N	116W	1936	1,2,3,4,5	1										
Bone-Spring Divide	7E18	9200	32	55N	89W	1956	2,3,4,5	1	East Rim Divide	10F17	7950	32	37N	111W	1936	1,2,3,4,5	1										
Burgess R.S. #2	7E33	7900	36	56N	89W	1955	2,3,4,5	1	Four Mile Meadows	10F6	7770	35	45N	112W	1936	2,3,4,5	5										
Gloom Creek	7E14	9300	32	55N	87W	1956	2,3,4,5	1	Greys Boundary	10F18	5800	33	37N	118W	1936	1,2,3,4,5	1,4										
Granite Pass	7E17	6950	19	54N	88W	1956	2,3,4,5	1	Gros Ventre	10F19	8750	36	40N	111W	1948	2,3,4,5	1										
North Tongue	7E15	8800	17	55N	89W	1956	2,3,4,5	1	Grover Park Divide	10G3	7500	27	33N	116W	1936	1,2,3,4,5	1										
Sibley Lake	7E11	8000	10	55N	88W	1956	2,3,4,5	1	Loomis Park	10F16	8500	14	37N	111W	1936	2,3,4,5	1										
Sucker Creek	7E12	9000	19	55N	87W	1956	2,3,4,5	1	Poison Meadows	10F6	8500	29	30N	116W	1949	2,3,4,5	1										
Steamboat Point	7E10	7500	32	56N	87W	1956	2,3,4,5	1	Teton Pass #2	10F13	8500	24	41N	118W	1936	1,2,3,4,5	1,4										
Wood Rock G.S.	7E13	8500	3	54N	88W	1956	2,3,4,5	1	Togwotee Pass	10F9	9600	29	44N	110W	1936	2,3,4,5	5										
Muddy Creek G.S.	6E2	7800	2	48N	84W	1956	2,3,4,5	1	Turpin Meadows	10F5</																	

COOPERATIVE SNOW SURVEYS

Summary of Snow Measurements

February 1, 1959

	No. of Courses Averaged	1959 Basin Snow Water in Percentage of 1958 1957 Average		
		1958	1957	Average
Madison River - Yellowstone Park	3	106%	66%	71%
Upper Yellowstone - Yellowstone Park	8	115%	90%	85%
Lower Yellowstone - Clarks Fork	1	126%	91%	
Lower Yellowstone - Wind River	8	140%	112%	89%
Lower Yellowstone - Popo Agie River	7	85%	68%	57%
Lower Yellowstone - Owl Creek	2	172%	146%	91%
Lower Yellowstone - Greybull River	1	62%	65%	68%
Lower Yellowstone - Shoshone River	3	124%	105%	99%
Lower Yellowstone - Nowood Creek	6	150%	137%	
Lower Yellowstone - Shell Creek	7	181%	133%	
Lower Yellowstone - Porcupine Creek	2	270%	214%	
Lower Yellowstone - Tongue River	11	176%	146%	
Lower Yellowstone - Powder River	5	154%	150%	
North Platte - Sweetwater	2	76%	61%	55%
North Platte - Laramie River	10	115%	90%	112%
North Platte - Crow Creek	1	175%	49%	90%
North Platte - Above Seminole	15	92%	70%	94%
Missouri - Cheyenne River	1	144%	98%	111%
Upper Colorado - Green River	7-10	84%	84%	
Snake River - Above Jackson Lake	12	94%	83%	85%
Jackson Lake to Palisades	13	99%	101%	90%
Bear River	3	68%	68%	68%



WYOMING STREAM-FLOW FORECASTS FEBRUARY 1, 1959

BASIN AND TRIBUTARY	April - September 30 Seasonal Stream-Flow in Thousands of Acre Feet				
	Forecast Runoff	% 15-Yr. Avg.	Measured Runoff		
			1957	1956	15-Yr. Avg. 1938-52**
NORTH POPO AGIE Milford (near)	64	75%	123	96	86
LITTLE POPO AGIE Lander (near)	37	75%	62	44	49
WIND RIVER Dubois (at)	98	95%	146	114	102**
SHOSHONE RIVER Buffalo Bill Dam (below)(1)	667	96%	1115	1014	823
LARAMIE RIVER Jelm (at)(2)	100	95%	168	96	105*
ENCAMPMENT RIVER Encampment (near)	128	80%	214	140	160*
NORTH PLATTE RIVER North Gate (at) Saratoga (at)	220 590	90% 90%	537 1168	232 590	245 657
MEDICINE BOW RIVER Hanna (near)	100	90%	146	42	111
SWEETWATER RIVER Alcova (at)	51	70%	94	43	73
GREEN RIVER Warren Bridge (at)	250	75%	394	440	333



WYOMING STREAM-FLOW FORECASTS FEBRUARY 1, 1959

BASIN AND TRIBUTARY	April - September 30 Seasonal Stream-Flow in Thousands of Acre Feet				
	Forecast Runoff	Measured Runoff			
		15-Yr. Avg.	1957	1956	15-Yr. Avg. 1938-52**
SNAKE RIVER Moran (at)(3)	815	95%	936	1251	858
PACIFIC CREEK Moran (near)	153	92%	188	243	166**
BUFFALO FORK Moran (near)	368	108%	402	488	356**
GROS VENTRE Kelly (at)	261	100%	301	403	261**
HOBACK Jackson (near)	375	97%	441	623	386**
SNAKE RIVER State Line (at)(3)	2850	97%	2901	3848	2949**
SALT RIVER State Line (at)	316	88%	411	435	360
BEAR RIVER Evanston (near) Randolph (near)	102 55	83% 47%	158 142	124 94	123 116*
SMITH'S FORK Border (near)	92	77%	148	152	119

All stream data taken from observed flow records with the following exceptions:

- (1) Observed flow corrected for storage in Buffalo Bill Reservoir and Hart Mountain Diversion.
- (2) Observed flow corrected for Colorado diversion above station.
- (3) Observed flow corrected for Jackson Lake Storage.

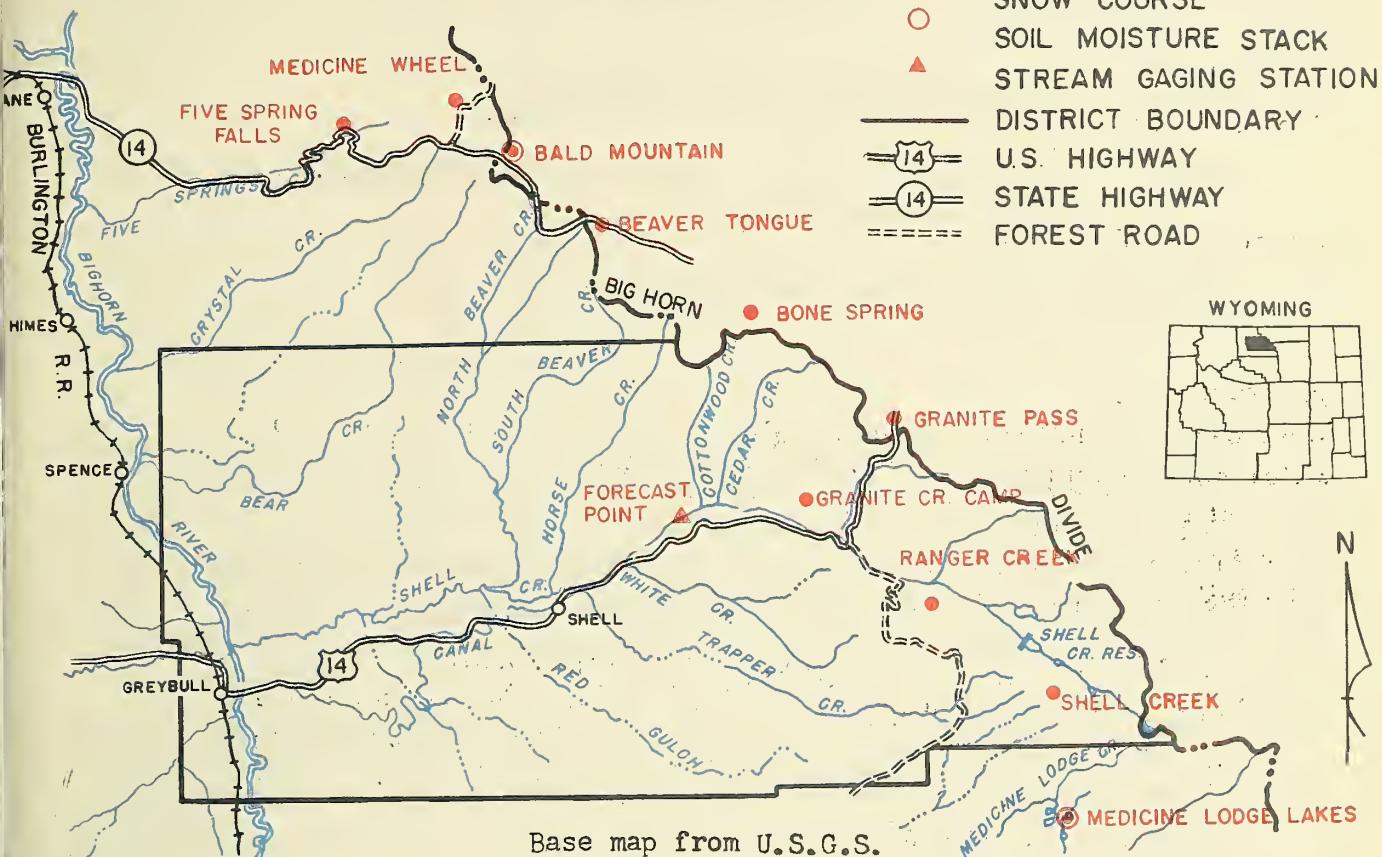
\* Less than 15.

\*\* Estimated 1938-52 average.



SNOW SURVEY & WATER SUPPLY FORECAST  
FOR  
SHELL VALLEY SOIL CONSERVATION DISTRICT  
BIG HORN COUNTY, WYOMING

5 0 5 10  
SCALE IN MILES



Base map from U.S.G.S.

### SNOW

SNOW COURSE			CURRENT INFORMATION			PAST RECORD		
NO.	NAME	ELEVATION	DATE OF SURVEY	SNOW DEPTH (Inches)	WATER CONTENT (Inches)	WATER CONTENT (Inches) LAST YEAR	WATER CONTENT (Inches) NORMAL	YEARS OF RECORD
7E31	Five Springs Falls	7500	1-30	33	8.5	2.4	3.2	3
7E30	Medicine Wheel	9000	1-27	53	16.3	6.8	8.7	3
7E21	Bald Mountain	9600	1-26	58	17.3	8.4	11.5	3
7E20	Beaver Tongue	9200	1-26	58	17.3	7.8	11.0	3
7E18	Bone Spring	9200	1-29	50	13.4	7.7	10.4	3
7E17	Granite Pass	8950	1-29	47	12.9	7.4	10.4	3
7E22	Granite Creek Camp	7800	1-26	21	4.1	2.8	3.6	3
7E4	Ranger Creek	8800	1-26	35	7.8	4.8	6.2	3
7E23	Shell Creek	9600	1-26	43	11.3	7.5	9.9	3
7E24	Medicine Lodge Lake	9500	1-27	37	9.2	6.6	7.7	3

### SOIL MOISTURE

SOIL MOISTURE STACK			DATE OF SURVEY	PERCENTAGE OF SOIL MOISTURE			YEARS OF RECORD
NO.	NAME	ELEVATION		CURRENT	LAST YEAR	NORMAL	
7E21M	Bald Mountain	9600	1-26	24%	15%	--	1
7E24M	Medicine Lodge Lakes	9500	1-27	24%	21%	--	1

SNOW SURVEY & WATER SUPPLY FORECAST  
FOR  
SHELL VALLEY SOIL CONSERVATION DISTRICT  
BIG HORN COUNTY, WYOMING

February 1, 1959

To: The Cooperator, Shell Valley SCD

From: Dominic J. Feeley, Work Unit Conservationist,  
Soil Conservation Service

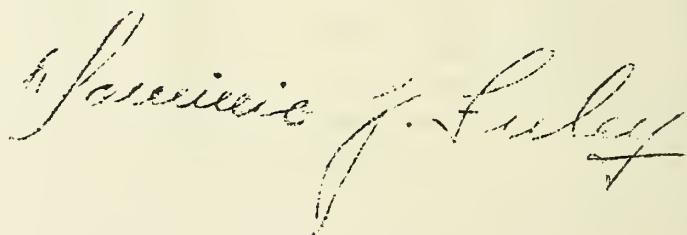
Subject: 1959 Seasonal Water Supply

The February 1, 1959, snow surveys have found an exceptionally heavy snow pack for this time of year. Current information indicates a basin water content that is 90% higher than last year at this time and 43% above the past three-year average for this date. Please note how the basin varies from 162% of normal in the north half down to 120% of average in the southern half. (Average, or normal, is considered to be 100%).

The first duty of snow melt is to bring the soil beneath the snow pack up to field capacity. The balance of the snow water then becomes direct runoff. The soil moisture stacks indicate an average of 24% of soil moisture, as compared to an average of 18% for last year. Therefore, the field capacity of the mountain soil will take less water from the snow pack than was required in 1958.

If subsequent storms along the Big Horn Divide prove to be normal or near normal for the balance of the winter, the April 1 to September 30 flow in Shell Creek will be adequate for irrigation requirements.

As the picture varies each month, current information will be given to you for your analysis.



WYOMING SNOW SURVEYS - ABOUT FEBRUARY 1, 1959

DRAINAGE BASIN and SNOW COURSE	No. or State	Elev.	SNOW COVER MEASUREMENTS						
			1959			PAST RECORD			
			Date of Survey	Snow Depth (In.)	Water Content (In.)	Water Content (In.)	1938-52	1958	1957
<u>MADISON RIVER - YELLOWSTONE PARK</u>									
Norris Basin $\div$	10E2	7500	1/29	29	5.4	5.3	6.6	7.5**	9
21 Mile <sup>m</sup>	11E6	7150	2/1	38	8.8	8.6	13.5	11.4	21
West Yellowstone <sup>m</sup>	11E7	6700	1/31	26	5.0	4.2	9.1	8.0	21
<u>UPPER YELLOWSTONE - YELLOWSTONE PARK</u>									
Canyon	10E3	7750	2/1	42	9.8	7.7	10.0	9.8**	14
Cooke City <sup>m</sup> $\div$	10D7	7400	1/31	26	5.0	4.6	5.8	6.1**	12
East Entrance $\div$	10E6	7000	1/30	32	7.3	7.3	8.9	8.7**	10
Lake Camp	10E4	7850	2/1	30	5.7	4.5	6.0	6.7**	13
Lupine Creek	10E1	7300	1/29	31	6.6	4.4	8.2	7.2*	16
Norris Basin $\div$	10E2	7500	1/29	29	5.4	5.3	6.6	7.5**	9
Sylvan Pass $\div$	10E5	7100	1/30	39	9.6	8.1	10.1	10.2*	15
Thumb Divide *** $\div$	10E7	7900	1/27	45	12.0	11.7	12.8	15.8**	11
<u>LOWER YELLOWSTONE - CLARK'S FORK</u>									
Lodgepole	9E1	8200	1/30	31	6.8	5.4	7.5		3
<u>LOWER YELLOWSTONE - WIND RIVER</u>									
Big Warm	9F12	8800	1/22	23	4.7	3.7	5.3		4
Brooks Lake	10F8	9200		Abandoned					
Burroughs Creek	9F4	8800	1/26	40	10.4	6.1	7.3	11.0**	10
Dinwoodie	9F10	10000	1/27	27	6.3	6.0	6.7	8.6**	10
Dinwoodie Glacier $\mp$	9F17	10500	1/30	27	6.3				
Dry Creek	9F9	9500	1/27	18	3.9	2.8	3.5	4.6**	10
DuNoir	9F6	8750	1/22	21	4.3	2.7	4.5	6.3*	17
Geyser Creek	9F7	8500	1/23	17	4.2	2.3	4.2	5.5**	10
Little Warm	9F8	9500	1/23	38	10.1	7.5	9.3	11.9**	9
Sheridan R.S. #2	9F14	7500	1/22	17	3.3	2.9	4.2		4
T-Cross Ranch	9F3	8000	1/26	22	4.4	3.5	5.2	5.0*	18
Togwotee Pass $\div$	10F9	9600	1/29	75	20.9	15.1	16.9	19.2	23
Twenty Lakes $\mp \div$	9G7	10000	1/30	12	2.0				

Averages are for the 15 year base period of 1938 to 1952.

\* Average is for 15 years of data within and adjacent to the 1938-52 period.

\*\* Average of all past data.

$\div$  Adjacent drainage.

<sup>m</sup> Montana snow courses.

$\mp$  Aerial stadia marker.



WYOMING SNOW SURVEYS - ABOUT FEBRUARY 1, 1959

DRAINAGE BASIN and SNOW COURSE	No. or State	Elev.	SNOW COVER MEASUREMENTS					
			1959			PAST RECORD		
			Date of Survey	Snow Depth (In.)	Water Content (In.,)	Water Content (In.)	1938-52 1958	Prior Yrs. of Average

LOWER YELLOWSTONE - POPO AGIE RIVER

Blue Ridge	8G2	9500	2/2	21	4.5	5.5	6.0	8.2*	17
Bruce's Camp	8G5	6500	2/3	11	2.1	1.6	0.6		3
Hobbs Park	9G3	10000	1/29	33	6.9	7.0	10.6	12.5**	10
Mosquito Park R.S.	9G4	9500	1/29	18	2.8	3.3	4.2	5.4*	15
Sawmill Glade	8G1	8500	2/2	19	3.2	4.8	4.1	5.2*	17
South Pass $\div$	8G3	9000	2/3	26	5.6	7.1	9.0	9.8*	17
St. Lawrence R.S.	9F11	9000	1/28	12	2.0	2.0	3.6	4.6*	15
Trout Creek	9G2	8400	1/29	20	2.9	3.2	3.6	3.5**	10
Twenty Lakes $\mp$	9G7	10000	1/30	12	2.0				

LOWER YELLOWSTONE - OWL CREEK

Beavers Mill	9F2	8900	1/30	22	5.0	2.2	3.2	5.0**	10
Owl Creek	8F1	8700	1/30	17	2.9	2.4	2.2	3.7**	10

LOWER YELLOWSTONE - GREYBULL RIVER

Timber Creek #2	9E3	8800	1/28	7	1.3	2.1	2.0	1.9**/	7
Wood River #2	9F1	8000	1/29	16	3.2	3.4	2.6		4

LOWER YELLOWSTONE - SHOSHONE RIVER

Carter Mountain $\div$	9E4	7800	1/28	9	1.4	3.1	4.0		2
East Entrance $\div$	10E6	7000	1/30	32	7.3	7.3	8.9	8.7**	10
Sylvan Pass $\div$	10E5	7100	1/30	39	9.6	8.1	10.1	10.2*	15
Togwotee Pass $\div$	10F9	9600	1/29	75	20.9	15.1	16.9	19.2	23

LOWER YELLOWSTONE - NOWOOD CREEK

Cold Springs Camp	7E25	8700	1/27	27	6.5	4.0	4.8		3
Medicine Lodge Lakes	7E24	9500	1/27	37	9.2	6.6	7.2		3
Munkres Pass $\div$	7E8	9700	2/1	33	8.5	5.4	6.0		4
Onion Gulch	7E27	8100	2/1	31	7.6	5.0	6.4		3
Tensleep Lake	7E26	9075	1/31	38	9.1	6.7	6.4		3
Tyrell R.S.	7E35	8300	1/31	31	7.7	4.8	4.6		3
Tensleep R.S.	7E7	8300	1/31	31	7.5	N.R.	4.9		1

Averages are for the 15 year base period of 1938 to 1952.

\* Average is for 15 years of data within and adjacent to the 1938-52 period.

\*\* Average of all past data.

$\div$  Adjacent drainage.

$\mp$  Aerial stadia marker.

\*\*/ Timber Creek #1 abandoned. Timber Creek #2 average obtained from relationship of old and new courses.



WYOMING SNOW SURVEYS - ABOUT FEBRUARY 1, 1959

DRAINAGE BASIN and SNOW COURSE	No. or State	Elev.	SNOW COVER MEASUREMENTS					
			1959			PAST RECORD		
			Date of Survey	Snow Depth (In.)	Water Content (In.)	Water Content (In.)	1938-52	Prior Yrs. of Record
<u>LOWER YELLOWSTONE - SHELL CREEK</u>								
Bald Mountain $\div$	7E21	9600	1/26	58	17.3	8.4	11.8	3
Beaver-Tongue $\div$	7E20	9200	1/26	58	17.3	7.8	11.2	3
Bone-Spring $\div$	7E18	9200	1/29	50	13.4	7.7	9.9	3
Granite Cr. Camp	7E22	7800	1/26	21	4.1	2.8	3.8	3
Granite Pass $\div$	7E17	8950	1/29	47	12.9	7.4	10.2	3
Ranger Creek	7E4	8800	1/26	35	7.8	4.8	6.5	3
Shell Creek	7E23	9600	1/26	43	11.3	7.5	10.0	3
<u>LOWER YELLOWSTONE - PORCUPINE CREEK</u>								
Five Springs Falls	7E31	7500	1/30	33	8.5	2.4	2.6	3
Medicine Wheel $\div$	7E30	9000	1/27	53	16.3	6.8	9.0	3
<u>LOWER YELLOWSTONE - TONGUE RIVER</u>								
Beaver-Tongue $\div$	7E20	9200	1/26	58	17.3	7.8	11.2	3
Big Goose #2	7E32	7700	1/30	25	5.9	3.6	4.4	3
Bone-Spring $\div$	7E18	9200	1/29	50	13.4	7.7	9.9	3
Burgess R.S. #2	7E33	7900	1/27	27	7.0	3.4	4.1	3
Dome Lake #2	7E34	8800	1/30	30	7.5	4.8	6.0	3
Gloom Creek	7E14	9300	1/28	37	10.3	6.4	6.9	3
Granite Pass $\div$	7E17	8950	1/29	47	12.9	7.4	10.2	3
North Tongue	7E15	8800	1/27	39	11.0	N.R.	4.4	3
Sibley Lake	7E11	8000	1/26	33	8.6	5.5	5.4	3
Sucker Creek	7E12	9000	1/28	37	10.2	6.3	6.3	3
Steamboat Point	7E10	7500	1/26	26	6.3	3.4	3.4	3
Wood Rock G.S.	7E13	8500	1/28	33	8.5	4.9	6.0	3
<u>LOWER YELLOWSTONE - POWDER RIVER</u>								
Muddy Creek G.S. $\div$	7E28	7500	2/1	15	3.9	2.3	2.2	3
Munkres Pass $\div$	7E8	9700	2/1	33	8.5	5.4	6.0	4
Onion Gulch	7E27	8100	2/1	31	7.6	5.0	6.4	3
Soldier Park	7E5	8700	2/1	20	4.6	3.0	1.6	2.9**
Sour Dough	7E6	8500	2/2	24	5.5	3.8	3.8	3

Averages are for the 15 year base period of 1938 to 1952.

\*\* Average of all past data.

$\div$  Adjacent drainage.



## WYOMING SNOW SURVEYS - ABOUT FEBRUARY 1, 1959

DRAINAGE BASIN and SNOW COURSE	State	Elev.	SNOW COVER MEASUREMENTS						
			1959			PAST RECORD			
			Date of Survey	Snow Depth (In.)	Water Content (In.)	Water Content (In.)			Prior 1938-52 Yrs. of Record
						1958	1957	Average	

NORTH PLATTE - SWEETWATER

Dutch Joe	9G5	8700	1/28	27	5.3	6.6	7.7		3
Grannier Meadows #1	8G4	9000	2/3	24	5.1	7.0	8.4	9.6*	17
South Pass $\div$	8G3	9000	2/3	26	5.6	7.1	9.0	9.8*	17
Larsen Creek	9G6	9000	1/29	28	6.1	8.3	N.R.		2

NORTH PLATTE - LARAMIE RIVER

Albany $\div$	6H11	9400	1/27	37	9.6	9.1	10.9	9.6**	10
Brooklyn Lake #1 $\div$	6H1	10200	1/26	48	13.8	13.0	17.0	13.6	21
Brooklyn Lake #2 $\div$	6H13	10200	1/26	48	13.1	12.4	16.5		3
Cameron Pass <sup>c</sup> $\div$	5J1	10300	1/30	54	14.9	13.2	12.8	12.5*	20
Chambers Lake $\div$	5J2	9000	2/1	26	8.1	5.8	8.2	5.0	20
Deadman Hill <sup>c</sup> $\div$	5J6	10300	1/30	43	11.1	9.2	9.5	7.3*	15
Fox Park $\div$	6H12	9200	1/30	20	4.7	4.1	6.4	4.0*	22
Hairpin Turn #2	6H2	9500	1/26	28	7.2	6.1	9.6	7.1	21
LaBonte $\div$	5G2	8450	1/27	12	2.6	3.0	4.7	4.2**	10
Libby Lodge #2	6H3	8700	1/26	28	6.7	6.2	8.8	6.2	21
Pole Mountain #2 $\div$	5H1	8700	1/27	15	2.8	1.6	5.7	3.1	22
Roach <sup>c</sup> $\div$	6J12	9800	1/30	48	12.0	10.1	10.7	10.7*	17
Rock River $\div$	6H14	9500			N.R.				

NORTH PLATTE - ABOVE SEMINOE RESERVOIR

Albany $\div$	6H11	9400	1/27	37	9.6	9.1	10.9	9.6**	10
Bottle Creek	6H8	8200	1/29	29	6.8	7.7	13.3	8.2	21
Boxelder $\div$	5G1	9000	2/3	17	3.5	3.4	5.0	3.1**	8
Cameron Pass <sup>c</sup> $\div$	5J1	10300	1/30	54	14.9	13.2	12.8	12.5*	20
Casper Mountain $\div$	6G1	8700	1/29	27	5.0	7.0	9.6		3
Columbine <sup>c</sup> $\div$	6J3	9300	1/30	58	14.0	14.9	18.1	14.3	23
Elk Mountain $\div$	6H15				N.R.				
Fox Park $\div$	6H12	9200	1/30	20	4.7	4.1	6.4	4.0*	22
LaBonte $\div$	5G2	8450	1/27	12	2.6	3.0	4.7	4.2**	10
North Barrett Cr. $\div$	6H5	9400	1/30	51	14.7	14.1	15.4	11.6	21
North French Cr. $\div$	6H4	10200	1/30	57	17.1	N.R.	24.1	16.4	21
Northgate <sup>c</sup>	6J7	8500				2.6	5.8	4.4**	9
Old Battle $\div$	6H10	9800	1/29	51	12.8	21.1	26.6	19.2	21
Rock River $\div$	6H14	9500			N.R.				
Park View <sup>c</sup>	6J2	9200	1/30	25	4.7	3.7	7.8	6.0*	21
Ryan Park $\div$	6H6	8400	1/30	23	6.9	7.1	10.0	6.8	21
Webber Spring	6H9	9000	1/29	35	7.6	9.9	16.5	10.8	21
Willow Creek Pass <sup>c</sup> $\div$	6H5	9500	1/30	30	6.1	6.2	10.0	7.6*	19

Averages are for the 15 year base period of 1938 to 1952.

\* Average is for 15 years of data within and adjacent to the 1938-52 period.

\*\* Average of all past data.

$\div$  Adjacent drainage.

$\pm$  Aerial stadia marker.

<sup>c</sup> Colorado snow courses



## WYOMING SNOW SURVEYS - ABOUT FEBRUARY 1, 1959

DRAINAGE BASIN and SNOW COURSE	No. or State	Elev.	SNOW COVER MEASUREMENTS							
			1959			PAST RECORD				
			Date of Survey	Snow Depth (In.)	Water Content (In.)	Water Content (In.)	1958	1957	Average	Prior Record
<u>NORTH PLATTE - CROW CREEK</u>										
Pole Mountain #2	5H1	8700	1/27	15	2.8	1.6	5.7	3.1	22	
<u>MISSOURI - CHEYENNE RIVER</u>										
Upper Spearfish <sup>s</sup>	3E1	6500	1/29	23	4.9	3.4	5.0	4.4*	15	
<u>UPPER COLORADO - GREEN RIVER</u>										
Big Park $\ddagger$	10G11	8700	1/30	40	10.4					
Blind Bull Summit $\ddagger$	10G2	8750	1/30	60	17.7					
Dutch Joe R.S.	9G5	8700	1/28	27	5.3	6.6	7.7			3
East Rim Divide $\ddagger$	10F17	7950	1/30	31	6.9	6.5	6.7			4
Green River Lakes	9F16	8100			Abandoned					
Kendall R.S.	10F15	7900	1/27	27	6.1	5.8	6.3			3
Loomis Park $\ddagger$	10F16	8500	1/27	42	10.2	N.R.	9.4			3
Mulligan Park	9F1	8900	1/26	25	5.9	6.4	7.4			3
Old Battle $\ddagger$	6H10	9800	1/29	51	12.8	21.1	26.6	19.2		21
Piney LaBarge	10G10	8820	1/29	44	11.4	N.R.	11.9			1
Snyder Basin R.S. <sup>#2</sup>	10G13	8040	1/29	39	9.3	N.R.	9.6			1
Soda Lake	10G14	8300	1/28	43	11.4	12.5	13.1			2
Triple Peaks	10G15	8500	1/28	57	16.8	18.7	15.6			2
<u>SNAKE RIVER - ABOVE JACKSON LAKE</u>										
Arizona ***	10F1	6850	1/28	43	9.2	10.1	12.3	11.7		40
Astor Creek ***	10E8	7700	1/27	55	15.5	16.4	19.0	20.0		40
Base Camp *** $\ddagger$	10F2	6900	1/29	51	11.5	9.7	12.4	13.0**		12
Coulter Creek ***	10E10	7600	1/26	48	12.3	13.0	15.7	13.8		40
Glade Creek ***	10E13	7200	1/27	42	11.0	14.1	14.9	14.6		40
Grassy Lake $\ddagger$	10E15	7265	1/30	73	20.2	21.1	24.0	21.9*		19
Huckleberry Div.***	10E14	7300	1/28	47	10.4	11.6	12.9	12.5		40
Lewis Lake Div.***	10E9	7900	1/27	76	23.4	23.6	27.3	27.4		40
Moran ***	10F4	6800	1/28	36	7.6	8.7	8.2	7.8		40
Moran Bay ***	10F3	6800	1/28	51	12.8	14.1	14.9	13.5		40
Snake River Sta.***	10E12	6780	1/27	42	11.0	12.3	14.3	13.0		40
Thumb Divide *** $\ddagger$	10E7	7900	1/27	45	12.0	11.7	12.8	15.8**		11

Averages are for the 15 year base period of 1938 to 1952.

\* Average is for 15 years of data within and adjacent to the 1938-52 period.

\*\* Average of all past data.

\*\*\* February, 1930-50 water contents estimated from January 15 and February 15 snow surveys and Snake River climatological data.

s South Dakota snow course.

$\ddagger$  Adjacent drainage.

F Aerial stadia marker.



WYOMING SNOW SURVEYS - ABOUT FEBRUARY 1, 1959

DRAINAGE BASIN and SNOW COURSE	No. or State	Elev.	SNOW COVER MEASUREMENTS						
			1959			PAST RECORD			
			Date of Survey	Snow Depth (In.)	Water Content (In.)	Water Content (In.)	Prior 1958	1957	Average Record
<u>JACKSON LAKE TO PALISADES</u>									
Afton R.S.	10G4	6200	1/28	9	2.2	4.2	4.1	3.8	23
Base Camp *** $\div$	10F2	6900	1/29	51	11.5	9.7	12.4	13.0**	12
Blackrock	10F7	8600	1/29	60	15.2	11.8	12.6	14.8	23
Blind Bull Summit $\mp$ $\div$	10G2	8750	1/30	60	17.7				
Bryan Flat	10F14	6250	2/2	26	6.0	7.7	5.8	6.7	23
CCC Camp $\div$	10G7	7500	1/27	24	5.9	7.9	7.8	7.9	23
Cottonwood Lake $\mp$	10G5	7500	1/30	39	10.0				
Deadman Ranch $\mp$	10G1	6534	1/30	23	6.2				
East Rim Divide $\div$	10F17	7950	1/30	31	6.9	6.6	6.7		4
Four Mile Meadows	10F6	7770	1/29	42	9.1	7.5	8.4	9.1	23
Greys Boundary	10F18	5800	1/26	23	6.2	10.2	6.3	7.5	23
Grover Park Divide	10G3	7500	1/28	24	5.5	8.4	7.5	7.5	23
Loomis Park $\div$	10F16	8500	1/27	42	10.2	N.R.	9.4		2
Salt River Summit $\div$	10G8	7900	1/27	30	7.4	9.9	10.0	11.1**	10
Snow King Mtn. #1	10F11	7600	Destroyed						
Snow King Mtn. #2	10F12	7600	2/2	28	6.1	6.8	5.7		4
Teton Pass #2 $\div$	10F13	8500	1/30	76	21.6	22.4	19.4	24.2**	14
Togwotee Pass $\div$	10F9	9600	1/29	75	20.9	15.1	16.9	19.2	23
Turpin Meadows	10F5	6930	1/29	37	7.3	6.8	8.3	7.4	23
Yellowjacket	10F10	7675	2/1	25	5.0	3.0	3.5	4.6**	14

BEAR RIVER

Big Park $\mp$ $\div$	10G11	8700	1/30	40	10.4				
CCC Camp $\div$	10G7	7500	1/27	24	6.0	7.9	7.8	7.9	23
Piney LaBarge $\div$	10G10	8820	1/29	44	11.4	N.R.	11.9		1
Salt River Summit $\div$	10G8	7900	1/27	30	7.4	9.9	10.0	11.1**	10
Trial Lake <sup>u</sup> $\div$	10J8	9800	1/29	50	10.9	17.7	18.0	16.6	6

Averages are for the 15 year base period of 1938 to 1952.

\*\* Average of all past data.

\*\*\* February, 1930-50 water contents estimated from January 15 and February 15 snow surveys and Snake River climatological data.

u Utah snow course.

$\div$  Adjacent drainage.

$\mp$  Aerial stadia marker.



STATUS OF WYOMING AND SOUTH DAKOTA RESERVOIR STORAGE - FEB. 1, 1959

BASIN and/or STREAM	RESERVOIR	USABLE CAPACITY 1000's AF	USABLE STORAGE - 1000 ACRE FEET			
			1959	1958	1957	15-Yr.Avg. 1938-52
Snake River	Jackson	847.0	470.6	613.1	85.5	479.3
North Platte	Seminoe	981.8	818.1	613.5	255.5	385.9*
North Platte	Pathfinder	1011.0	67.3	654.9	229.9	362.3*
North Platte	Alcova**	190.5	-72.4#	28.3	171.7	82.5*
North Platte	Guernsey	39.8	32.7	28.0	31.7	34.9
North Platte	Southerland	185.0	58.6	73.2	26.0	47.6
North Platte	Kingsley	1995.0	1403.2	925.4	565.0	1087.7*
North Platte	Minatare	60.8	33.2	33.8	2.0	23.4
North Platte	Glendo		332.2			
Kansas Basin	Bonny	39.9	37.7	39.3	36.0	18.5*
Kansas Basin	Swanson Lake	116.1	114.2	121.6	47.6	
Kansas Basin	Enders	36.0	33.6	35.5	31.5	20.0*
Kansas Basin	Harry Strunk	33.9	33.4	33.0	19.0	23.6*
Kansas Basin	Harlan County	252.9	316.8	256.9	72.5	
Kansas Basin	Cedar Bluff	176.8	174.4	180.6	119.0	173.8*
Laramie River	Wheatland	70.4	27.9	N.R.	4.5	28.5
Belle Fourche	Belle Fourche	185.2	32.0	59.6	28.4	95.7*
Belle Fourche	Keyhole	190.3	0.0	1.2	11.2	
Shoshone River	Buffalo Bill***	439.8	0.0	189.4	143.9	277.4
Wind River	Boysen	560.0	78.3	322.4	240.6	
Wind River	Pilot Butte	31.6	6.3	14.4	9.2	13.0*
Wind River	Bull Lake	152.0	56.3	75.1	76.0	63.7*
Cheyenne River	Angostura	92.0	46.4	56.8	25.4	52.0*
Cheyenne River	Deerfield	15.1	8.6	10.9	7.6	12.8*
Grand River	Shadehill	84.0	71.4	79.4	76.6	
Green River	Big Sandy	38.3	3.7	33.4	9.9	

\* Average is for less than 15 years of record in the 1938-52 period.

\*\* Alcova, downstream from Seminoe and Pathfinder includes 160,170 acre feet of storage that is unavailable to the Kendrick Project.

\*\*\* Usable capacity 439,800, however, 59,500 acre-feet are inactive except in emergency.

# Alcova is drawn below irrigation active storage.





Federal - State - Private  
COOPERATIVE SNOW SURVEYS

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Furnishes the basic data  
necessary for forecasting  
water supply for irrigation,  
domestic and municipal water  
supply, hydro-electric power  
generation, navigation,  
mining and industry

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*"The Conservation of Water begins  
with the Snow Survey"*